

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'CAPLUS' ENTERED AT 13:03:20 ON 16 DEC 2003
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FILE 'USPATFULL' ENTERED AT 13:03:20 ON 16 DEC 2003
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=> antibody(P) (protein C or serine proteinase) (P) inhibitor

L1 376 FILE CAPLUS
L2 340 FILE BIOSIS
L3 344 FILE MEDLINE
L4 317 FILE EMBASE
L5 191 FILE USPATFULL

TOTAL FOR ALL FILES

L6 1568 ANTIBODY(P) (PROTEIN C OR SERINE PROTEINASE) (P) INHIBITOR

=> antibody(P) (protein C or serine proteinase) (P) inhibitor(P) complex(P) cleave

L7 2 FILE CAPLUS
L8 1 FILE BIOSIS
L9 1 FILE MEDLINE
L10 1 FILE EMBASE
L11 7 FILE USPATFULL

TOTAL FOR ALL FILES

L12 12 ANTIBODY(P) (PROTEIN C OR SERINE PROTEINASE) (P) INHIBITOR(P)
COMPLEX(P) CLEAVE

=> dup rem

ENTER L# LIST OR (END):l12

PROCESSING COMPLETED FOR L12

L13 9 DUP REM L12 (3 DUPLICATES REMOVED)

=> d l13 ibib abs total

L13 ANSWER 1 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2003:237907 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis
of colon cancer

INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

NUMBER

KIND

DATE

PATENT INFORMATION: US 2003166064 A1 20030904

APPLICATION INFO.: US 2002-99926 A1 20020314 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302051P	20010629 (60)
	US 2001-279763P	20010328 (60)
	US 2000-223283P	20000803 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	8531	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 2 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2003:200449 USPATFULL
TITLE: Selective cellular targeting: multifunctional delivery vehicles, multifunctional prodrugs, use as antineoplastic drugs
INVENTOR(S): Glazier, Arnold, Newton, MA, UNITED STATES
PATENT ASSIGNEE(S): Drug Innovation & Design, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003138432	A1	20030724
APPLICATION INFO.:	US 2000-738625	A1	20001215 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-712465, filed on 15 Nov 2000, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-165485P	19991115 (60)
	US 2000-239478P	20001011 (60)
	US 2000-241939P	20001010 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	N. Scott Pierce, Esq., HAMILTON, BROOK, SMITH & REYNOLDS, P.C., Two Militia Drive, Lexington, MA, 02421-4799	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
LINE COUNT:	18716	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the compositions, methods, and applications of a novel approach to selective cellular targeting. The purpose of this invention is to enable the selective delivery and/or selective activation of effector molecules to target cells for diagnostic or therapeutic purposes. The present invention relates to multi-functional prodrugs or targeting vehicles wherein each functionality is capable of enhancing targeting selectivity, affinity,

intracellular transport, activation or detoxification. The present invention also relates to ultra-low dose, multiple target, multiple drug chemotherapy and targeted immunotherapy for cancer treatment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2003:106233 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of pancreatic cancer
INVENTOR(S): Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003073144	A1	20030417
APPLICATION INFO.:	US 2002-60036	A1	20020130 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-333626P	20011127 (60)
	US 2001-305484P	20010712 (60)
	US 2001-265305P	20010130 (60)
	US 2001-267568P	20010209 (60)
	US 2001-313999P	20010820 (60)
	US 2001-291631P	20010516 (60)
	US 2001-287112P	20010428 (60)
	US 2001-278651P	20010321 (60)
	US 2001-265682P	20010131 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 14253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 4 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2002:272801 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of colon cancer
INVENTOR(S): Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002150922	A1	20021017
APPLICATION INFO.:	US 2001-998598	A1	20011116 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304037P	20010710 (60)
	US 2001-279670P	20010328 (60)
	US 2001-267011P	20010206 (60)
	US 2000-252222P	20001120 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	9233	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2002:243051 USPATFULL
 TITLE: Compositions and methods for the therapy and diagnosis of ovarian cancer
 INVENTOR(S): Algate, Paul A., Issaquah, WA, UNITED STATES
 Jones, Robert, Seattle, WA, UNITED STATES
 Harlocker, Susan L., Seattle, WA, UNITED STATES
 PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002132237	A1	20020919
APPLICATION INFO.:	US 2001-867701	A1	20010529 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-207484P	20000526 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
LINE COUNT:	25718	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention

and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2002:242791 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis
of colon cancer
INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002131971	A1	20020919
APPLICATION INFO.:	US 2001-33528	A1	20011226 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302051P	20010629 (60)
	US 2001-279763P	20010328 (60)
	US 2000-223283P	20000803 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	8083	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer,
particularly colon cancer, are disclosed. Illustrative compositions
comprise one or more colon tumor polypeptides, immunogenic portions
thereof, polynucleotides that encode such polypeptides, antigen
presenting cell that expresses such polypeptides, and T cells that are
specific for cells expressing such polypeptides. The disclosed
compositions are useful, for example, in the diagnosis, prevention
and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2002:32581 USPATFULL
TITLE: Methods to treat alzheimer's disease
INVENTOR(S): Hom, Roy, San Francisco, CA, UNITED STATES
Mamo, Shumeye S., Oakland, CA, UNITED STATES
Tung, Jay, Belmont, CA, UNITED STATES
Gailunas, Andrea, San Francisco, CA, UNITED STATES
John, Varghese, San Francisco, CA, UNITED STATES
Fang, Lawrence Y., Foster City, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002019403	A1	20020214
APPLICATION INFO.:	US 2001-816876	A1	20010323 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-191528P	20000323 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN,
55402-0903
NUMBER OF CLAIMS: 63
EXEMPLARY CLAIM: 1
LINE COUNT: 8655

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed toward substituted hydroxyethylene
compounds of formula (XII) ##STR1##

useful in treating Alzheimer's disease and other similar diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 1994:242132 CAPLUS

DOCUMENT NUMBER: 120:242132

TITLE: Immune complex independent activation of complement,

C1s secreted from hamster embryo malignant
fibroblasts, Nil2C2 in serum free culture medium
AUTHOR(S): Yamaguchi, Kiichiro; Kato, Norio; Sakai, Norie;
Matsumoto, Misako; Nagasawa, Shigeharu; Hatsuse,
Hiromi; Toyoguchi, Toru; Moriya, Hideshige; Sakiyama,
Hisako

CORPORATE SOURCE: Division of Physiology and Pathology, National
Institute of Radiological Sciences, 4-9-1 Anagawa,
Chiba, 262, Japan

SOURCE: Biochimica et Biophysica Acta (1994), 1205(1), 133-8
CODEN: BBACAQ; ISSN: 0006-3002

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Antibody** independent activation of complement C1s was examd. by
immunoblot anal. using an **antibody** against a synthetic peptide
of hamster C1s L chain. Approx. 50% of C1s secreted from hamster embryo
malignant fibroblasts Nil2C2 was functionally active in its two-chain form
in the serum free culture medium. In contrast, no active C1s was found in
a culture medium of hamster embryo fibroblasts (HEF). Active C1s was
detectable, however, in the culture medium after HEF became a cell line.
The immune **complex** independent activation of C1s was also obsd.
in rat cell lines but not in secondary rat embryo fibroblasts. C1s in a
membrane fraction of Nil2C2 was a proenzyme form and was not activated by
incubation of the membrane itself, suggesting that C1s was activated after
secretion. The activation of C1s was not inhibited by human C1
inhibitor (C1-INH), benzamidine or soy bean trypsin
inhibitor (SBTI) but was inhibited by leupeptin, nitrophenyl
guanidinobenzoate and DFP. The results suggest that C1s is activated
either by a **serine proteinase**(s) other than those
reported to **cleave** C1s or by an activator which directly
stimulates autoactivation of C1s.

L13 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:96734 CAPLUS

DOCUMENT NUMBER: 118:96734

TITLE: Contact factor proteases and the complexes formed with
.alpha.2-macroglobulin can interfere in protein C
assays by cleaving amidolytic substrates

AUTHOR(S): Mackie, I. J.; Gallimore, M.; Machin, S. J.

CORPORATE SOURCE: Middlesex Sch. Med., Univ. Coll., London, UK

SOURCE: Blood Coagulation & Fibrinolysis (1992), 3(5), 589-95
CODEN: BLFIE7; ISSN: 0957-5235

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Blood plasma from women taking combined oral contraceptives and

cold-activated plasma contain proteases which **cleave** chromogenic substrates in **protein C** (PC) assays in the absence of PC activators, such as Protac. This spontaneous activity makes a background subtraction necessary and makes PC assays less accurate. Here, 2 commonly used substrates, <Glu-Pro-Arg-pNA (S-2366) and 2AcOH.H-D-Lys(Cbo)-Pro-Arg-pNA (PC substrate), were investigated and it was found that cold-activated normal and PC-deficient plasmas gave absorbance values up to 300 times higher than buffer blanks. Blood-coagulation factor XIa cleaved these substrates but the activity was not blocked by corn or lima bean trypsin **inhibitors**, soybean trypsin **inhibitor** (SBTI), hirudin or .epsilon.-amino-n-caproic acid (EACA). Kaolin activation of normal, factor XI-, factor IX-, factor VIII-, factor VII- and PC-deficient, but not of factor XII- or prekallikrein (PKK)-deficient plasmas led to cleavage of chromogenic substrate for **protein C**. The PC substrates were cleaved by purified kallikrein and .alpha.- and .beta.-factor XIIa. Immunoabsorption with .alpha.2-macroglobulin (.alpha.2M) **antibodies** removed 60% of the .alpha.2M and 70% of the activity on PC substrate. Gel filtration of normal plasma on Sephadex G-150 gave a single peak of PC activity and antigen in the included vol. After cold activation of the fractions, a 2nd PC-like peak appeared in the void vol., but with no detectable PC antigen. This peak coincided with .alpha.2M (chromogenic and ELISA) and plasma kallikrein (S-2302), but factor XII (measured with a substrate insensitive to kallikrein) eluted sep. Gel filtration of a cold activated plasma gave a similar peak of spontaneous activity on PC substrate, which was not inhibited by SBTI. It was suggested that the PC substrates may be cleaved by kallikrein and other enzymes **complexes** to .alpha.2M, which retain activity on small substrates. Samples exceptionally susceptible to cold activation should be collected into anticoagulant contg. kallikrein **inhibitors** and methylamine.

=> file .chemistry
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
46.49	46.70

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-1.30	-1.30

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FILE 'USPATFULL' ENTERED AT 13:07:15 ON 16 DEC 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> antibody(P) (protein C or serine proteinase) (P) inhibitor(P) complex

L14 101 FILE CAPLUS
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANTIBODY(P) (PROTEIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ROTEINASE) (P) INHIBITOR'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INHIBITOR(P) COMPLEX'

L15 138 FILE BIOTECHNO
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANTIBODY(P) (PROTEIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ROTEINASE) (P) INHIBITOR'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INHIBITOR(P) COMPLEX'

L16 1 FILE COMPENDEX

L17 3 FILE ANABSTR

L18 0 FILE CERAB

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANTIBODY(P) (PROTEIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ROTEINASE) (P) INHIBITOR'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INHIBITOR(P) COMPLEX'

L19 0 FILE METADEX

L20 38 FILE USPATFULL

TOTAL FOR ALL FILES

L21 281 ANTIBODY(P) (PROTEIN C OR SERINE PROTEINASE) (P) INHIBITOR(P)
COMPLEX

=> l21(P) cleave

L22 2 FILE CAPLUS
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L15(P) CLEAVE'

L23 4 FILE BIOTECHNO
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L16(P) CLEAVE'

L24 0 FILE COMPENDEX

L25 0 FILE ANABSTR

L26 0 FILE CERAB

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L19(P) CLEAVE'

L27 0 FILE METADEX

L28 7 FILE USPATFULL

TOTAL FOR ALL FILES

L29 13 L21(P) CLEAVE

=> dup rem

ENTER L# LIST OR (END): l29

PROCESSING COMPLETED FOR L29

L30 12 DUP REM L29 (1 DUPLICATE REMOVED)

=> d l30 ibib abs total

L30 ANSWER 1 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2003:237907 USPATFULL

TITLE: Compositions and methods for the therapy and diagnosis
of colon cancer

INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES

Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
 Xu, Jiangchun, Bellevue, WA, UNITED STATES
 Secrist, Heather, Seattle, WA, UNITED STATES
 Jiang, Yuqiu, Kent, WA, UNITED STATES
 PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003166064	A1	20030904
APPLICATION INFO.:	US 2002-99926	A1	20020314 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302051P	20010629 (60)
	US 2001-279763P	20010328 (60)
	US 2000-223283P	20000803 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	8531	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 2 OF 12 USPATFULL on STN
 ACCESSION NUMBER: 2003:200449 USPATFULL
 TITLE: Selective cellular targeting: multifunctional delivery vehicles, multifunctional prodrugs, use as antineoplastic drugs
 INVENTOR(S): Glazier, Arnold, Newton, MA, UNITED STATES
 PATENT ASSIGNEE(S): Drug Innovation & Design, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003138432	A1	20030724
APPLICATION INFO.:	US 2000-738625	A1	20001215 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-712465, filed on 15 Nov 2000, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-165485P	19991115 (60)
	US 2000-239478P	20001011 (60)
	US 2000-241939P	20001010 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	N. Scott Pierce, Esq., HAMILTON, BROOK, SMITH & REYNOLDS, P.C., Two Militia Drive, Lexington, MA, 02421-4799	

NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
LINE COUNT: 18716

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the compositions, methods, and applications of a novel approach to selective cellular targeting. The purpose of this invention is to enable the selective delivery and/or selective activation of effector molecules to target cells for diagnostic or therapeutic purposes. The present invention relates to multi-functional prodrugs or targeting vehicles wherein each functionality is capable of enhancing targeting selectivity, affinity, intracellular transport, activation or detoxification. The present invention also relates to ultra-low dose, multiple target, multiple drug chemotherapy and targeted immunotherapy for cancer treatment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 3 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2003:106233 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of pancreatic cancer
INVENTOR(S): Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003073144	A1	20030417
APPLICATION INFO.:	US 2002-60036	A1	20020130 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-333626P	20011127 (60)
	US 2001-305484P	20010712 (60)
	US 2001-265305P	20010130 (60)
	US 2001-267568P	20010209 (60)
	US 2001-313999P	20010820 (60)
	US 2001-291631P	20010516 (60)
	US 2001-287112P	20010428 (60)
	US 2001-278651P	20010321 (60)
	US 2001-265682P	20010131 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 14253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 4 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2002:272801 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis
of colon cancer
INVENTOR(S): Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002150922	A1	20021017
APPLICATION INFO.:	US 2001-998598	A1	20011116 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-304037P	20010710 (60)
	US 2001-279670P	20010328 (60)
	US 2001-267011P	20010206 (60)
	US 2000-252222P	20001120 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	9233	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 5 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2002:243051 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis
of ovarian cancer
INVENTOR(S): Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002132237	A1	20020919
APPLICATION INFO.:	US 2001-867701	A1	20010529 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-207484P	20000526 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	

NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 6 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2002:242791 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of colon cancer
INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002131971	A1	20020919
APPLICATION INFO.:	US 2001-33528	A1	20011226 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302051P	20010629 (60)
	US 2001-279763P	20010328 (60)
	US 2000-223283P	20000803 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	8083	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 7 OF 12 USPATFULL on STN

ACCESSION NUMBER: 2002:32581 USPATFULL
TITLE: Methods to treat alzheimer's disease
INVENTOR(S): Hom, Roy, San Francisco, CA, UNITED STATES
Mamo, Shumeye S., Oakland, CA, UNITED STATES
Tung, Jay, Belmont, CA, UNITED STATES
Gailunas, Andrea, San Francisco, CA, UNITED STATES

John, Varghese, San Francisco, CA, UNITED STATES
Fang, Lawrence Y., Foster City, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002019403	A1	20020214
APPLICATION INFO.:	US 2001-816876	A1	20010323 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-191528P	20000323 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903	
NUMBER OF CLAIMS:	63	
EXEMPLARY CLAIM:	1	
LINE COUNT:	8655	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed toward substituted hydroxyethylene compounds of formula (XII) ##STR1##

useful in treating Alzheimer's disease and other similar diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L30 ANSWER 8 OF 12 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
ACCESSION NUMBER: 1998:28130398 BIOTECHNO
TITLE: Interaction of **serine proteinases**
with pNiXa, a serpin of Xenopus oocytes and embryos
AUTHOR: Kotyza J.; Varghes A.H.; Korza G.; Sunderman F.W. Jr.
CORPORATE SOURCE: F.W. Sunderman Jr., 270 Barnes Road, Whiting, VT 05778, United States.
E-mail: 103040.3027@compuserve.com
SOURCE: Biochimica et Biophysica Acta - Protein Structure and Molecular Enzymology, (17 FEB 1998), 1382/2 (266-276), 38 reference(s)
CODEN: BBAEDZ ISSN: 0167-4838
PUBLISHER ITEM IDENT.: S0167483897001659
DOCUMENT TYPE: Journal; Article
COUNTRY: Netherlands
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1998:28130398 BIOTECHNO
AB In a previous study, kinetic assays showed that pNiXa, an Ni(II)-binding serpin of Xenopus oocytes and embryos, strongly inhibits bovine chymotrypsin, weakly inhibits porcine elastase, and does not inhibit bovine trypsin. In this study, analyses by SDS-PAGE and gelatin zymography showed that an SDS-resistant **complex** is formed upon the interaction of pNiXa with bovine chymotrypsin. No such pNiXa-enzyme **complex** was detected after pNiXa interactions with porcine elastase, bovine trypsin, or human cathepsin G. The major products of pNiXa cleavage by the four proteinases were partially sequenced by Edman degradation. The cleavage products were also tested by immunoblotting with an **antibody** to the His-cluster of pNiXa, and by radio-blotting with .sup.6.sup.3Ni(II). These assays showed that chymotrypsin and elastase **cleave** pNiXa at the P.sub.1-P'.sub.1 (Thr-Lys) peptide bond near the C-terminus, while trypsin and cathepsin G **cleave** pNiXa at specific peptide bonds near the N-terminus, within an interesting 26-residue segment, rich in Lys and Gln, that separates the His-cluster of pNiXa from the rest of the molecule. The segment lacks homology to other serpins, but resembles a domain of Xenopus POU3 transcription factor. This study identifies the specific sites for interactions of four **serine proteinases**

with pNiXa, indicates that pNiXa inhibition of chymotrypsin involves a serpin-like mechanism, and shows that .sup.6.sup.3Ni(II)-binds to the His-cluster of pNiXa.

L30 ANSWER 9 OF 12 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
ACCESSION NUMBER: 1997:27053346 BIOTECHNO
TITLE: FLICE induced apoptosis in a cell-free system.
Cleavage of caspase zymogens
AUTHOR: Muzio M.; Salvesen G.S.; Dixit V.M.
CORPORATE SOURCE: V.M. Dixit, Dept. of Pathology, University of Michigan
Medical Sch., Box 0602, 1301 Catherine St., Ann Arbor,
MI 48109, United States.
E-mail: vmdixit@umich.edu
SOURCE: Journal of Biological Chemistry, (1997), 272/5
(2952-2956), 43 reference(s)
CODEN: JBCHA3 ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1997:27053346 BIOTECHNO
AB Engagement of CD95 or tumor necrosis factor 1 receptor (TNFR-1) by ligand
or agonist **antibodies** is capable of activating the cell death
program, the effector arm of which is composed of mammalian
interleukin-1.beta. converting enzyme (ICE)-like cysteine proteases
(designated caspases) that are related to the Caenorhabditis elegans
death gene, CED-3. Caspases, unlike other mammalian cysteine proteases,
cleave their substrates following aspartate residues.
Furthermore, proteases belonging to this family exist as zymogens that in
turn require cleavage at internal aspartate residues to generate the
two-subunit active enzyme. As such, family members are capable of
activating each other. Remarkably, both CD95 and TNFR-1 death receptors
initiate apoptosis by recruiting a novel ICE/CED-3 family member,
designated FLICE/MACH, to the receptor signaling **complex**.
Therefore, FLICE/MACH represents the apical triggering protease in the
cascade. Consistent with this, recombinant FLICE was found capable of
proteolytically activating downstream caspases. Furthermore, CrmA, a pox
virus-encoded serpin that inhibits Fas and tumor necrosis factor-induced
cell death attenuates the ability of FLICE to activate downstream
caspases.

L30 ANSWER 10 OF 12 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
ACCESSION NUMBER: 1995:25166370 BIOTECHNO
TITLE: Purification and characterization of dog mast cell
protease-3, an oligomeric relative of tryptases
AUTHOR: Raymond W.W.; Tam E.K.; Blount J.L.; Caughey G.H.
CORPORATE SOURCE: Department of Medicine, Cardiovascular Research
Institute, University of California, San Francisco, CA
94143-0911, United States.
SOURCE: Journal of Biological Chemistry, (1995), 270/22
(13164-13170)
CODEN: JBCHA3 ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1995:25166370 BIOTECHNO
AB The existence of a protein -48% identical with mast cell tryptases was
predicted previously from a dog mastocytoma cDNA. **Antibodies**
raised against a peptide based on the deduced sequence suggested that the
protein (dog mast cell protease-3, dMCP-3) is expressed in mast cells. In
this report, characterization of the protein purified from mastocytomas
reveals an N- glycosylated, high molecular weight, tryptic serine
protease, which appears to be a tetramer of catalytic subunits,

approximately half of which are linked by disulfide bonds. The oligomeric **complex** yields a single NH₂-terminal sequence, which is identical with that predicted by dMCP-3 cDNA. This finding, and the lack of closely related genes on blots of genomic DNA, predict that each subunit is the product of one gene. Although dMCP-3 binds to heparin, it is active and stable at low ionic strength in heparin's absence. It resists inactivation by **inhibitors** in plasma but is sensitive to small **inhibitors**, e.g. leupeptin and bis(5-amidino-2-benzimidazolyl)methane (BABIM). dMCP-3 hydrolyzes extended peptidyl p-nitroanilides ending in basic residues, with P1 arginine preferred to lysine; it hydrolyzes the Arg^{sup.1.sup.8}-Ser^{sup.1.sup.9} bond of calcitonin gene-related peptide but **cleaves** neither vasoactive intestinal peptide nor casein. These data suggest that dMCP-3 is a unique serine protease whose stability, formation of intersubunit disulfide bonds, **inhibitor** susceptibilities and substrate preferences differ from those of its closest relatives, the mast cell tryptases.

L30 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 1994:242132 CAPLUS

DOCUMENT NUMBER: 120:242132

TITLE: Immune complex independent activation of complement, C1s secreted from hamster embryo malignant fibroblasts, Nil2C2 in serum free culture medium
AUTHOR(S): Yamaguchi, Kiichiro; Kato, Norio; Sakai, Norie; Matsumoto, Misako; Nagasawa, Shigeharu; Hatsuse, Hiromi; Toyoguchi, Toru; Moriya, Hideshige; Sakiyama, Hisako

CORPORATE SOURCE: Division of Physiology and Pathology, National Institute of Radiological Sciences, 4-9-1 Anagawa, Chiba, 262, Japan

SOURCE: Biochimica et Biophysica Acta (1994), 1205(1), 133-8
CODEN: BBACAQ; ISSN: 0006-3002

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Antibody** independent activation of complement C1s was examd. by immunoblot anal. using an **antibody** against a synthetic peptide of hamster C1s L chain. Approx. 50% of C1s secreted from hamster embryo malignant fibroblasts Nil2C2 was functionally active in its two-chain form in the serum free culture medium. In contrast, no active C1s was found in a culture medium of hamster embryo fibroblasts (HEF). Active C1s was detectable, however, in the culture medium after HEF became a cell line. The immune **complex** independent activation of C1s was also obsd. in rat cell lines but not in secondary rat embryo fibroblasts. C1s in a membrane fraction of Nil2C2 was a proenzyme form and was not activated by incubation of the membrane itself, suggesting that C1s was activated after secretion. The activation of C1s was not inhibited by human C1 **inhibitor** (C1-INH), benzamidine or soy bean trypsin **inhibitor** (SBTI) but was inhibited by leupeptin, nitrophenyl guanidinobenzoate and DFP. The results suggest that C1s is activated either by a **serine proteinase(s)** other than those reported to **cleave** C1s or by an activator which directly stimulates autoactivation of C1s.

L30 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:96734 CAPLUS

DOCUMENT NUMBER: 118:96734

TITLE: Contact factor proteases and the complexes formed with .alpha.2-macroglobulin can interfere in protein C assays by cleaving amidolytic substrates

AUTHOR(S): Mackie, I. J.; Gallimore, M.; Machin, S. J.

CORPORATE SOURCE: Middlesex Sch. Med., Univ. Coll., London, UK

SOURCE: Blood Coagulation & Fibrinolysis (1992), 3(5), 589-95
CODEN: BLFIE7; ISSN: 0957-5235

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Blood plasma from women taking combined oral contraceptives and cold-activated plasma contain proteases which **cleave** chromogenic substrates in **protein C** (PC) assays in the absence of PC activators, such as Protac. This spontaneous activity makes a background subtraction necessary and makes PC assays less accurate. Here, 2 commonly used substrates, <Glu-Pro-Arg-pNA (S-2366) and 2AcOH.H-D-Lys(Cbo)-Pro-Arg-pNA (PC substrate), were investigated and it was found that cold-activated normal and PC-deficient plasmas gave absorbance values up to 300 times higher than buffer blanks. Blood-coagulation factor XIa cleaved these substrates but the activity was not blocked by corn or lima bean trypsin **inhibitors**, soybean trypsin **inhibitor** (SBTI), hirudin or .epsilon.-amino-n-caproic acid (EACA). Kaolin activation of normal, factor XI-, factor IX-, factor VIII-, factor VII- and PC-deficient, but not of factor XII- or prekallikrein (PKK)-deficient plasmas led to cleavage of chromogenic substrate for **protein C**. The PC substrates were cleaved by purified kallikrein and .alpha.- and .beta.-factor XIIa. Immunoabsorption with .alpha.2-macroglobulin (.alpha.2M) **antibodies** removed 60% of the .alpha.2M and 70% of the activity on PC substrate. Gel filtration of normal plasma on Sephadex G-150 gave a single peak of PC activity and antigen in the included vol. After cold activation of the fractions, a 2nd PC-like peak appeared in the void vol., but with no detectable PC antigen. This peak coincided with .alpha.2M (chromogenic and ELISA) and plasma kallikrein (S-2302), but factor XII (measured with a substrate insensitive to kallikrein) eluted sep. Gel filtration of a cold activated plasma gave a similar peak of spontaneous activity on PC substrate, which was not inhibited by SBTI. It was suggested that the PC substrates may be cleaved by kallikrein and other enzymes **complexes** to .alpha.2M, which retain activity on small substrates. Samples exceptionally susceptible to cold activation should be collected into anticoagulant contg. kallikrein **inhibitors** and methylamine.

=> file .meeting

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=> antibody(P)(protein C or serine proteinase)(P)inhibitor(P)complex

L31 3 FILE AGRICOLA
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANTIBODY(P)(PROTEIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ROTEINASE)(P)INHIBITOR'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INHIBITOR(P)COMPLEX'
L32 138 FILE BIOTECHNO
L33 0 FILE CONFSCI
L34 0 FILE HEALSAFE
L35 0 FILE IMSDRUGCONF
L36 11 FILE LIFESCI
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ANTIBODY(P)(PROTEIN'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ROTEINASE)(P)INHIBITOR'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INHIBITOR(P)COMPLEX'
L37 0 FILE MEDICONF
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
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PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'ROTEINASE)(P)INHIBITOR'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'INHIBITOR(P)COMPLEX'
L38 33 FILE PASCAL

TOTAL FOR ALL FILES

L39 185 ANTIBODY(P)(PROTEIN C OR SERINE PROTEINASE)(P) INHIBITOR(P)
COMPLEX

=> l39 and stenflo

L40 0 FILE AGRICOLA
L41 0 FILE BIOTECHNO
L42 0 FILE CONFSCI
L43 0 FILE HEALSAFE
L44 0 FILE IMSDRUGCONF
L45 0 FILE LIFESCI
L46 0 FILE MEDICONF
L47 0 FILE PASCAL

TOTAL FOR ALL FILES

L48 0 L39 AND STENFLO

=> l39(P)uncomplex

L49 0 FILE AGRICOLA
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L32(P)UNCOMPLEX'
L50 0 FILE BIOTECHNO

L51 0 FILE CONFSCI
 L52 0 FILE HEALSAFE
 L53 0 FILE IMSDRUGCONF
 L54 0 FILE LIFESCI
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'L37(P)UNCOMPLEX'
 L55 0 FILE MEDICONF
 PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
 FIELD CODE - 'AND' OPERATOR ASSUMED 'L38(P)UNCOMPLEX'
 L56 0 FILE PASCAL

TOTAL FOR ALL FILES
 L57 0 L39(P) UNCOMPLEX

=> (serine proteinase or protein C inhibitor) (5A)complex(7A) (inhibitor or antitrypsin)

L58 0 FILE AGRICOLA
 L59 48 FILE BIOTECHNO
 L60 0 FILE CONFSCI
 L61 0 FILE HEALSAFE
 L62 0 FILE IMSDRUGCONF
 L63 13 FILE LIFESCI
 L64 0 FILE MEDICONF
 L65 30 FILE PASCAL

TOTAL FOR ALL FILES
 L66 91 (SERINE PROTEINASE OR PROTEIN C INHIBITOR) (5A) COMPLEX(7A) (INHIBITOR OR ANTITRYPSIN)

=> l39 and l66

L67 0 FILE AGRICOLA
 L68 12 FILE BIOTECHNO
 L69 0 FILE CONFSCI
 L70 0 FILE HEALSAFE
 L71 0 FILE IMSDRUGCONF
 L72 2 FILE LIFESCI
 L73 0 FILE MEDICONF
 L74 5 FILE PASCAL

TOTAL FOR ALL FILES
 L75 19 L39 AND L66

=> dup rem

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 L76 14 DUP REM L75 (5 DUPLICATES REMOVED)

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L76 ANSWER 1 OF 14 PASCAL COPYRIGHT 2003 INIST-CNRS. ALL RIGHTS RESERVED.
 on STN

ACCESSION NUMBER: 2002-0047243 PASCAL

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TITLE (IN ENGLISH): A sensitive immunochemical assay for measuring the concentration of the activated **protein C**

inhibitor complex in plasma : Use of a catcher **antibody** specific for the complexed/cleaved form of the **inhibitor**

AUTHOR: STRANDBERG Karin; KJELLBERG Margareta; KNEBEL Richard; LILJA Hans; STENFLO Johan

CORPORATE SOURCE: Department of Clinical Chemistry, University Hospital, Malmö, Lund University, Malmö, Sweden; Department of Orthopedic Surgery, University Hospital, Malmö, Lund University, Malmö, Sweden

SOURCE: Thrombosis and haemostasis, (2001), 86(2), 604-610, 37 refs.
ISSN: 0340-6245 CODEN: THHADQ

DOCUMENT TYPE: Journal

BIBLIOGRAPHIC LEVEL: Analytic

COUNTRY: Germany, Federal Republic of

LANGUAGE: English

AVAILABILITY: INIST-10255, 354000095761180160

AN 2002-0047243 PASCAL

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AB Activated **protein C** (APC) is a **serine proteinase** that regulates blood coagulation. In plasma it is inhibited mainly by the **protein C inhibitor** (PCI). The plasma concentrations of APC-PCI **complex** is increased in hypercoagulative states such as deep venous thrombosis. Formation of the APC-PCI **complex** induces a drastic conformational change in PCI that exposes new epitopes (neoepitopes) on the molecule. We have devised a simple immunofluorometric sandwich assay for measurements of the concentrations of APC-PCI **complex**, employing as the catcher, a monoclonal **antibody** that has a high affinity ($K_{sub.D} 4 \times 10^{sup.-.sup.1.sup.1} M$) for a complexation-specific neoepitope that is expressed on PCI. A monoclonal **antibody** against **protein C** is employed as the tracer. The method gives a linear dose-response curve (0.06-50 $\mu g/l$), has a low detection limit (0.06 $\mu g/l$) and no crossreactivity with native PCI at physiologic plasma concentrations. We have now determined the concentration of the APC-PCI **complex** in healthy individuals.

L76 ANSWER 2 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN DUPLICATE

ACCESSION NUMBER: 1998:28209560 BIOTECHNO

TITLE: Assessment of the trypsin-like human prostatic kallikrein, also known as hK2, in the seminal plasma of infertile men: Respective contributions of an ELISA procedure and of western blotting

AUTHOR: Tremblay R.R.; Coulombe E.; Cloutier S.; Brunet C.; Deperthes D.; Frenette G.; Dube J.Y.

CORPORATE SOURCE: Dr. R.R. Tremblay, Laval University Research Center, Hormonal Bioregulation Laboratory, 2705 Laurier Blvd., Sainte-Foy, Que. G1V 4G2, Canada.

SOURCE: Journal of Laboratory and Clinical Medicine, (1998), 131/4 (330-335), 21 reference(s)
CODEN: JLCMAK ISSN: 0022-2143

DOCUMENT TYPE: Journal; Article

COUNTRY: United States

LANGUAGE: English

SUMMARY LANGUAGE: English

AN 1998:28209560 BIOTECHNO

AB Human seminal plasma (SP) is a unique source of kallikreins. Prostate-specific antigen (hK3), which is a chymotrypsin-like human prostatic kallikrein (CHPK), and its cousin protein (hK2), which is recognized as a trypsin-like human prostatic kallikrein (THPK), have been assessed in infertility disorders to test the hypothesis that oligoasthenoteratozoospermia (OAT) is associated with an abnormal prostatic function. Monoclonal **antibodies** specific for THPK (hK2) were produced by Immunova, Canada, and used to develop a new enzyme-linked immunosorbent assay procedure and to perform Western blot analyses in SP. The immunoradiometric assay from Hybritech Inc., San Diego, Calif., was selected for CHPK (hK3) measurements in SP.

Determinations of the THPK and of CHPK contents in SP from four groups of subjects were performed after validation of the assays. The concentration of both kallikreins was similar In three groups of infertile men, and no statistical difference from the control group was recorded. Western blot analysis confirmed the existence of different molecular forms of both kallikreins In SP. Generally, these molecular forms were not affected by Infertility disorders except when obstructive azoospermia led to the exclusion of seminal vesicles, which are the sources of **protein C inhibitor** (PCl). No THPK-PCl **complex** was observed because THPK, unlike CHPK, is bound mainly to PCl within a few minutes after ejaculation. These data suggest that measurements of kallikreins in the SP of infertile men are much less useful than evaluation of their different molecular forms. Specifically, the absence of THPK-PCl appears to be a reliable feature of obstructive azoospermia, and this test should be routinely practiced In andrology laboratories.

L76 ANSWER 3 OF 14 BIOTECHNO . COPYRIGHT 2003 Elsevier Science B.V. on STN
 ACCESSION NUMBER: 1995:25057248 BIOTECHNO
 TITLE: Differential recognition of .alpha..sub.1-antitrypsin-elastase and .alpha..sub.1- antichymotrypsin-cathepsin G **complexes** by the low density lipoprotein receptor-related protein
 AUTHOR: Poller W.; Willnow T.E.; Hilpert J.; Herz J.
 CORPORATE SOURCE: Medical University Clinic, Clinical Biochem./Pathobiochemistry, Versbacher Strasse 5,D-97080 Wurzburg, Germany.
 SOURCE: Journal of Biological Chemistry, (1995), 270/6 (2841-2845)
 CODEN: JBCHA3 ISSN: 0021-9258
 DOCUMENT TYPE: Journal; Article
 COUNTRY: United States
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 AN 1995:25057248 BIOTECHNO
 AB Two multifunctional receptors, low density lipoprotein receptor-related protein (LRP) and gp330, have been implicated in the cellular uptake and degradation of a wide spectrum of functionally diverse ligands including plasma lipoproteins, proteases, and proteinase-**inhibitor complexes**. The two receptors show distinct tissue-specific expression patterns, suggesting different physiological functions. We have examined the cellular degradation of two **serine proteinase inhibitor** (serpin)-protease **complexes**, .alpha..sub.1- **antitrypsin**-neutrophil elastase (.alpha..sub.1AT.midldot.NEL) and .alpha..sub.1-antichymotrypsin-cathepsin G (.alpha..sub.1ACT.midldot.CathG) by normal murine fibroblasts (MEF) expressing LRP, and by a mutant flbroblast cell line (PEA13) which is genetically deficient for LRP. .alpha..sub.1AT.midldot.NEL **complexes** bound to LRP on ligand blots and were degraded efficiently by the MEF cells, but not by PEA13 cells. Degradation of the **complexes** was also significantly reduced by **antibodies** directed against LRP, further suggesting that fibroblasts require LRP for the cellular uptake and degradation of .alpha..sub.1AT.midldot.NEL **complexes**. In contrast to .alpha..sub.1AT.midldot.NEL, MEF cells did not degrade .alpha..sub.1ACT.midldot.CathG **complexes**. However, these **complexes** were rapidly degraded by the rat embryonal carcinoma cell line L2p58 which abundantly expresses gp330, raising the possibility that the .alpha..sub.1ACT.midldot.CathG **complex** might be recognized by gp330. Both **complexes** were efficiently metabolized by the hepatoma cell line HepG2, presumably involving the serpin-enzyme **complex** receptor. The differential recognition of serpin- protease **complexes** by fibroblasts and hepatoma cells, however, indicates that LRP, gp330, and the serpin-enzyme **complex** receptor are distinct proteins.

proteinase in semen, prostate-specific antigen (PSA). To provide a structural characterization of the PCI target, immunodetected as PSA, a procedure was developed to isolate low-molecular-mass and high-molecular-mass-forms of PCI from seminal fluid. The high-molecular-mass form of PCI, recognized by monoclonal **antibodies** against PSA, was dissociated by alkaline treatment into the low-molecular-mass form of PCI and a 33-kDa protein identified as PSA by 25 conclusive steps of N-terminal sequence analysis. We developed a sensitive immunofluorometric assay (IFMA) to measure PCI-PSA **complexes** in body fluids and investigated the rate at which purified PSA may form **complexes** with purified PCI. Formation of **complexes** detected by this IFMA and the appearance of SDS-stable approximately 90-kDa **complexes** paralleled loss of PSA activity recorded with chromogenic substrates. The rate of **complex** formation was slow compared to that reported for PCI and activated **protein C**, but was enhanced up to sixfold in the presence of heparin. Less than 10% of the initial PSA activity remained after 3 h incubation with a sevenfold molar excess of PCI and in the presence of heparin. In freshly collected ejaculates, the rate of PCI-PSA **complex** formation measured by IFMA was similar to that observed between the purified proteins, and paralleled the appearance of SDS-stable **complexes** by immunoblotting. During gel dissolution in freshly collected ejaculates, approximately 40% of immunodetected PCI becomes complexed to PSA. Although PCI is a slow **inhibitor** of PSA, **complexes** between PCI and PSA are detected at levels that correspond to an inactivation of up to 5% of the PSA activity in the ejaculate.

L76 ANSWER 6 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
DUPLICATE

ACCESSION NUMBER: 1993:23168183 BIOTECHNO
TITLE: Sodium dodecyl sulfate-induced dissociation of **complexes** between human tissue plasminogen activator and its specific **inhibitor**
AUTHOR: Gaussem P.; Grailhe P.; Angles-Cano E.
CORPORATE SOURCE: INSERM Unite 143, Centre Hospitalo, Universitaire de Bicetre, F-94275-Cedex, Paris, France.
SOURCE: Journal of Biological Chemistry, (1993), 268/16 (12150-12155)
CODEN: JBCHA3 ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English

AN 1993:23168183 BIOTECHNO

AB The stability of **complexes** between **serine proteinases** and their **inhibitors** after sodium dodecyl sulfate (SDS)-polyacrylamide gel electrophoresis has been claimed to indicate covalent bond formation. In this work we have investigated the effects of SDS on the stability of **complexes** between single-chain or two-chain tissue plasminogen activator (t-PA) and its **inhibitor** (PAI-1). **Complexes** formed by incubation of t-PA with PAI-1 for 15 min at 22 .degree.C were further incubated with various amounts of SDS before being subjected to SDS-polyacrylamide gel electrophoresis. The molecular species in the gels were identified both by zymography or by autoradiography after immunoblotting with **antibodies** directed against either t-PA or PAI-1. It was demonstrated that the interaction of SDS with t-PA.midldot.PAI-1 **complexes** before electrophoresis resulted in a transition from the complexed state to the free forms of t-PA and PAI-1 in a time- and dose-dependent manner. The first-order dissociation rate constant in the presence of 35 mM SDS at 22 .degree.C had a k(off) value of 1.4 x 10.sup.-.sup.2 min.sup.-.sup.1, which corresponds to a half-life of 49.5 min. The t-PA released from the **complexes** was fibrinolytically

L76 ANSWER 4 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 ACCESSION NUMBER: 1995:25369146 BIOTECHNO
 TITLE: **Complexes** of tissue kallikrein with
protein C inhibitor in
 human semen and urine
 AUTHOR: Espana F.; Fink E.; Sanchez-Cuenca J.; Gilabert J.;
 Estelles A.; Witzgall K.
 CORPORATE SOURCE: Hospital La Fe, Centro de Investigacion, Av. Campanar
 21,E-46009 Valencia, Spain.
 SOURCE: European Journal of Biochemistry, (1995), 234/2
 (641-649)
 CODEN: EJBCAI ISSN: 0014-2956
 DOCUMENT TYPE: Journal; Article
 COUNTRY: Germany, Federal Republic of
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 AN 1995:25369146 BIOTECHNO
 AB An ELISA was developed for quantifying the **complex** between
 tissue kallikrein (tKK) and **protein C**
inhibitor (PCI) (tKK:PCI) in seminal plasma and urine. The ELISA
 used purified tKK:PCI **complex** as a standard and was specific
 for this **complex** with a detection limit of about 1.1 pM.
 Purified tKK:PCI **complex** was obtained from human urine and was
 95% homogeneous as judged-by SDS/PAGE. The 90-kDa band corresponding to
 the purified tKK:PCI **complex** reacted with anti-tKK and anti-PCI
antibodies as judged by immunoblotting. Seminal plasma collected
 in the absence of extrinsic **inhibitors** contained 1.8 \pm 0.6
 nM tKK:PCI **complex** and 4.7 \pm 2.8 nM immunoreactive tKK (mean
 \pm SD, n= 10), which indicates that about 28 % of the total tKK
 immunoreactivity is forming **complexes** with PCI. When semen was
 collected in the presence of tKK **inhibitors** it had only about
 6% of the tKK complexed to PCI. In vitro studies showed that the tKK:PCI
complex formation in semen was accomplished in about 1 and that
 heparin stimulated both the rate and the extent of complexation of tKK
 with PCI. Native urine showed low levels of tKK:PCI **complex**,
 but after dialysis urine had 0.17 \pm 0.05 nM **complex**.
 Formation of tKK:PCI **complex** in urine and semen was also
 demonstrated by immunoblotting. These results suggest that PCI is a
 physiological **inhibitor** of tKK and provide additional evidence
 of the involvement of PCI in human reproduction.

L76 ANSWER 5 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 ACCESSION NUMBER: 1994:24067552 BIOTECHNO
 TITLE: **Complex** formation between **protein**
C inhibitor and prostate-specific
 antigen in vitro and in human semen
 AUTHOR: Christensson A.; Lilja H.
 CORPORATE SOURCE: Department of Clinical Chemistry, Lund University,
 Malmo General Hospital,S-214 01 Malmo, Sweden.
 SOURCE: European Journal of Biochemistry, (1994), 220/1
 (45-53)
 CODEN: EJBCAI ISSN: 0014-2956
 DOCUMENT TYPE: Journal; Article
 COUNTRY: Germany, Federal Republic of
 LANGUAGE: English
 SUMMARY LANGUAGE: English
 AN 1994:24067552 BIOTECHNO
 AB **Protein C inhibitor** (PCI), a **serine**
-proteinase inhibitor first purified from human blood
 plasma, occurs at high concentrations (3-4 μ M) in seminal fluid in
 both a high-molecular-mass and low-molecular-mass form. Immunochemical
 data have previously suggested that PCI in seminal plasma forms
complexes with the most abundant **serine**

active, whereas the released PAI-1 inhibited activator-dependent fibrinolysis. In a similar fashion, the well characterized non-acylated pair .alpha.1-proteinase **inhibitor**-elastase was dissociated by SDS treatment, confirming the validity of our experimental approach to demonstrate the reversibility of t-PA.midldot.PAI-1 **complexes**. These results demonstrate that SDS-polyacrylamide gel electrophoresis traps the molecular species in the state in which the proteins existed prior to the analysis, and they suggest that under the conditions used, the interaction of t-PA with PAI-1 results in the formation of nonacylated reversible **complexes**. This phenomenon may be relevant to the pathophysiology of fibrinolysis and to the general mechanism of **serine proteinase-inhibitor complex** formation.

L76 ANSWER 7 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1993:23210216 BIOTECHNO

TITLE: Expression and characterization of rat kallikrein-binding protein in Escherichia coli

AUTHOR: Ma J.; Chao L.; Zhou G.; Chao J.

CORPORATE SOURCE: Dept Biochemistry and Molecular Biol, Medical University of South Carolina, Charleston, SC 29425, United States.

SOURCE: Biochemical Journal, (1993), 292/3 (825-832)

CODEN: BIJOAK ISSN: 0264-6021

DOCUMENT TYPE: Journal; Article

COUNTRY: United Kingdom

LANGUAGE: English

SUMMARY LANGUAGE: English

AN 1993:23210216 BIOTECHNO

AB Rat kallikrein-binding protein is a novel **serine-proteinase inhibitor** that forms a covalent **complex** with tissue kallikrein. We have purified rat kallikrein-binding protein and cloned the cDNA and the gene encoding rat kallikrein-binding protein. In the present study, we have expressed rat kallikrein-binding protein in Escherichia coli with a T7-polymerase/promoter expression system. A high level of expression was detected by an e.l.i.s.a. with an average of 24.2 mg of recombinant rat kallikrein-binding protein per 1 of culture. The recombinant protein appeared as a major protein in a crude extract of Escherichia coli on SDS/ PAGE. It showed a molecular mass of 43 kDa and was recognized by polyclonal **antibody** to the native rat kallikrein-binding protein in Western-blot analysis. The recombinant rat kallikrein-binding protein has been purified to apparent homogeneity by DEAE-Sephacel CL-6B, hydroxyapatite Bio-Gel HPHT and Mono P 5/5 column chromatography. The purified recombinant rat kallikrein-binding protein showed immunological identity with the native rat kallikrein-binding protein purified from rat serum, in a specific e.l.i.s.a. To confirm the fidelity of the expression, the N-terminal ten amino acids of the recombinant rat kallikrein-binding protein were sequenced and were shown to match perfectly with those of the native rat kallikrein-binding protein. The purified recombinant rat kallikrein-binding protein formed SDS- and heat-stable **complexes** with rat tissue kallikrein (rK1) and T-kininogenase (rK10) in vitro, but not with other enzymes in the rat kallikrein gene family, such as tonin (rK2) and S3 protein (rK9), which indicates enzyme-specific binding. The properties of the recombinant rat kallikrein-binding protein including its size, charge, **complex** formation with target enzymes and immunological characteristics were compared with those of the native protein. This expression system provides a simple way to obtain a large amount of the biologically active recombinant protein, to study structure-function relationships of the rat kallikrein-binding protein and its interaction with its target enzymes.

L76 ANSWER 8 OF 14 PASCAL COPYRIGHT 2003 INIST-CNRS. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 1995-0200900 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 1995 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): A quantitative ELISA for the measurement of **complexes** of prostate-specific antigen with **protein C inhibitor** when using a purified standard
AUTHOR: ESPANA F.; SANCHEZ-CUENCA J.; VERA C. D.; ESTELLES A.; GILABERT J.
CORPORATE SOURCE: La Fe univ. hosp., res. cent., Valencia, Spain
SOURCE: The Journal of laboratory and clinical medicine, (1993), 122(6), 711-719, 44 refs.
ISSN: 0022-2143 CODEN: JLCMAK
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-2060, 354000059867900100

AN 1995-0200900 PASCAL
CP Copyright .COPYRGT. 1995 INIST-CNRS. All rights reserved.
AB The serine protease **inhibitor protein C inhibitor** is present in semen at a relatively high concentration and forms in vivo **complexes** with two plasminogen activators also present in semen, urokinase-type and tissue-type plasminogen activators. Therefore, the fact that prostate-specific antigen (PSA), a major prostate enzyme, **complexes** and inactivates **protein C inhibitor** (PCI) in semen could have implications in human reproduction. The present study was undertaken to develop an enzyme-linked immunosorbent assay (ELISA) for **complexes** of PSA with PCI (PSA: PCI) with purified PSA:PCI **complexes** as a standard. Seminal plasma was utilized as the starting material for purification of **complexes** by affinity chromatography on heparin-Sepharose and gel filtration. The final preparation contained equimolar concentrations of PSA and PCI and was used for calibration of an ELISA for PSA: PCI **complexes** involving polyclonal anti-PSA and horseradish peroxidase- labeled antiPCI **antibodies**. The ELISA had a detection limit of about 0.2 ng/ml of **complex** and was specific for PSA: PCI **complexes** because no color was developed at PSA or PCI concentrations up to 100 .mu.g/ml. Normal plasma or plasma from patients with prostate carcinoma who had high PSA levels had no detectable PSA: PCI **complexes**. Seminal plasma from voluntary donors collected in the absence of **inhibitors** and incubated at room temperature for at least 3 hours had PSA: PCI **complex** levels ranging from 30 to 46 .mu.g/ml, accounting for up to 34% of the total PCI in seminal plasma. When semen was collected in the presence of 1,10 phenanthrolinechloride, to block PSA activity, the mean level of PSA: PCI **complex** was 11 .+- . 6 .mu.g/ml and the amount of PCI complexed to PSA was 6% .+- . 2% of the total semen PCI level. The assay therefore makes it possible to carry out further studies on the interaction of PSA and PCI in vivo and in vitro

L76 ANSWER 9 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
ACCESSION NUMBER: 1993:23291697 BIOTECHNO
TITLE: **Complex** formation between **protein C inhibitor** and tissue plasminogen activator during thrombolytic therapy. Evidence of activation of **protein C** pathway
AUTHOR: Espana F.; Vicente V.; Estelles A.; Vazquez L.; Hendl S.; Sanchez-Cuenca J.; Aznar J.
CORPORATE SOURCE: Hospital 'La Fe', Centro de Investigacion, Av. Campanar, 21,46009 Valencia, Spain.
SOURCE: Fibrinolysis, (1993), 7/5 (308-315)
CODEN: FBRIE7 ISSN: 0268-9499
DOCUMENT TYPE: Journal; Article

COUNTRY: United Kingdom
LANGUAGE: English
SUMMARY LANGUAGE: English

AN 1993:23291697 BIOTECHNO

AB **Protein C inhibitor** (PCI) is a heparin-dependent serine protease **inhibitor** which, in vitro, inhibits activated **protein C** (APC), urokinase (u-PA) and tissue plasminogen activator (t-PA), plasma kallikrein (KK), thrombin and factors Xa and XIa. We have previously shown in vivo **complexes** of PCI with APC, u-PA and KK. Here we study the contribution of PCI to the inhibition of t-PA both in vitro and in vivo. PCI complexed to t-PA (t-PA:PCI) was measured by a sandwich ELISA using **antibodies** directed against each protein in the **complex**. The formation of t-PA:PCI **complexes** paralleled the inhibition of t-PA amidolytic activity by PCI in a purified system. In the plasma milieu, after incubation of 8 $\mu\text{g/mL}$ t-PA (final concentration) with human plasma for 2 h at 37 $^{\circ}\text{C}$, in the presence of heparin, the residual t-PA activity was about 38% and plasma contained 0.56 $\mu\text{g/mL}$ t-PA:PCI **complexes**. To study **complex** formation in vivo, human plasma samples from patients (n = 5) with myocardial infarction were analyzed following infusion of 100 mg recombinant t-PA for 2.5 h (10% initial bolus; 40% by a 20 min infusion, and 50% by a 2-h infusion). Maximum peak values of t-PA:PCI **complexes** were measured immediately after the second and third t-PA doses, ranging from 16 to 135 ng/mL. In contrast, during t-PA infusion the level of **complexes** of t-PA with plasminogen activator **inhibitor** -1 (t-PA:PAI-1) increased only slightly, from 2.4 \pm 1.5 to 7.2 \pm 4.6 ng/mL, and reached a maximum mean value of 17.2 \pm 20.6 ng/mL 2 h post-infusion. PCI antigen decreased during t-PA infusion from 80% \pm 16% to 71% \pm 7%. **Protein C** antigen levels decreased during t-PA infusion, with the subsequent appearance of **complexes** between APC and PCI (APC:PCI), and free protein S gradually declined during infusion, reaching levels of 69% of the basal value 2 h post-infusion. These data show that in vivo interaction of PCI and t-PA exists, which in turn support the view that PCI may play a role in the regulation of the fibrinolysis pathway. They also show that thrombolytic therapy with t-PA produces activation and a subsequent decrease in **protein C** antigen levels as well as in free protein S levels.

L76 ANSWER 10 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN DUPLICATE

ACCESSION NUMBER: 1991:21323567 BIOTECHNO

TITLE: Differential inhibition of rat mast cell proteinase I and II by members of the α -1-proteinase **inhibitor** family of **serine proteinase inhibitors**

AUTHOR: Pirie-Shepherd S.R.; Miller H.R.P.; Ryle A.

CORPORATE SOURCE: Moredun Research Institute, 408 Gilmerton Road, Edinburgh EH17 7JH, United Kingdom.

SOURCE: Journal of Biological Chemistry, (1991), 266/26 (17314-17319)

CODEN: JBCHA3 ISSN: 0021-9258

DOCUMENT TYPE: Journal; Article

COUNTRY: United States

LANGUAGE: English

SUMMARY LANGUAGE: English

AN 1991:21323567 BIOTECHNO

AB Rat mast cell proteinase II (RMCP II) from mucosal mast cells was titrated into rat serum, and the resulting **serine proteinase inhibitor** (serpin)-enzyme **complex** was purified by affinity chromatography on anti-RMCP II-Sepharose 4B and by Mono-Q anion-exchange. The purified **complex** was used to raise polyclonal **antibodies** which, after cross-absorption

against RMCP II-Sepharose 4B, were specific for serpin and were used to affinity purify two rat serpin molecules (RSI and RSII) that inhibit RMCP II in rat serum. The kinetic constants characterizing the interaction between RMCP II and RSI and RSII are $k(a)$, $2.2 \times 10^{sup.5}$ and $1.65 \times 10^{sup.5}$ m.^{sup.1} s.^{sup.1}, respectively; $K(i)$, $3.6 \times 10^{sup.0}$ and $1.0 \times 10^{sup.9}$ M; and $k(d)$, $7.9 \times 10^{sup.5}$ and $1.65 \times 10^{sup.4}$ s.^{sup.1}. Amino-terminal sequence analysis indicated that RSI and RSII are distinct, differing at the amino-terminal residues, and are products of the rat Spi-1 locus. Rat mast cell proteinase I (RMCP I) from connective tissue mast cells cleaved both RSI and RSII and was not inhibited.

L76 ANSWER 11 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 ACCESSION NUMBER: 1990:20330338 BIOTECHNO
 TITLE: Determination of plasma **protein C inhibitor** and of two activated **protein C-inhibitor complexes** in normals and in patients with intravascular coagulation and thrombotic disease
 AUTHOR: Espana F.; Vicente V.; Tabernero D.; Scharrer I.; Griffin J.H.
 CORPORATE SOURCE: Department of Molecular and Experimental Medicine, Research Institute of Scripps Clinic, La Jolla, CA 92037, United States.
 SOURCE: Thrombosis Research, (1990), 59/3 (593-608)
 CODEN: THBRAA ISSN: 0049-3848
 DOCUMENT TYPE: Journal; Article
 COUNTRY: United States
 LANGUAGE: English
 SUMMARY LANGUAGE: English

AN 1990:20330338 BIOTECHNO

AB We developed an ELISA to quantitate **complexes** of activated **protein C** (APC) with a major plasma APC **inhibitor**, .alpha..sub.1-antitrypsin (.alpha..sub.1AT) in human plasma based on the sandwich principle using two different **antibodies** directed towards **protein C** and .alpha..sub.1AT, respectively. This ELISA test was specific for APC:.alpha..sub.1AT **complexes** and sensitive to ≥ 150 pg **complex**. Fifty-one of 56 healthy donors and APC:.alpha..sub.1AT **complex** levels above the detection limit (3 ng/ml) ranging from 4 to 14 ng/ml (mean value \pm SD: 7.6 ± 2.5 ng/ml). Patients (n = 10) with disseminated intravascular coagulation (DIC) had detectable levels of APC:.alpha..sub.1AT **complex** ranging from 21 to 125 ng/ml (median: 69 ng/ml). **Complexes** of APC with plasma **protein C inhibitor** (PCI) were also measured using an ELISA sandwich assay. None of the 30 healthy donors had detectable levels (≥ 5 ng/ml) of APC:PCI **complex**, and plasma samples from 9 of 10 DIC patients had detectable concentrations of APC:PCI **complex** ranging from 10 to 63 ng/ml (median: 22 ng/ml). APC:.alpha..sub.1AT **complex** was detected in 25 of 26 patients with deep venous thrombosis (DVT), with levels ranging from 5 to 136 ng/ml (median: 23 ng/ml), whereas APC:PCI was detected in only 6 DVT patients, with levels between 11 and 105 ng/ml. PCI antigen levels in 70 normals ranged from 56 to 175% (mean \pm SD: $99.1\% \pm 24.2\%$). PCI antigen levels were decreased in DIC patients, in patients with cerebral arterial thrombosis, and in DVT patients undergoing heparin therapy, but not in patients with myocardial infarction. PCI antigen levels were decreased much further in DVT patients receiving heparin compared to those not receiving heparin, showing that heparin therapy is associated with a decrease in PCI levels. The detection in normal subjects and in thrombotic patients of circulating APC:**inhibitor complexes** supports the view that the **protein C** pathway is activated during DIC and DVT. Moreover, it emphasizes that both PCI and .alpha..sub.1AT are physiologic **inhibitors** of APC.

Thus, measurement of APC **complexes** may provide sensitive parameters for specific detection of activation of the clotting and **protein C** pathways.

L76 ANSWER 12 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
DUPLICATE

ACCESSION NUMBER: 1989:19208816 BIOTECHNO
TITLE: **Complex** formation between urokinase and plasma **protein C inhibitor** in vitro and in vivo
AUTHOR: Geiger M.; Huber K.; Wojta J.; Stingl L.; Espana F.; Griffin J.H.; Binder B.R.
CORPORATE SOURCE: Laboratory for Clinical and Experimental Physiology, Department of Medical Physiology, University of Vienna, A-1090 Vienna, Austria.
SOURCE: Blood, (1989), 74/2 (722-728)
CODEN: BLOOAW ISSN: 0006-4971
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1989:19208816 BIOTECHNO
AB **Protein C inhibitor** (PCl) and plasminogen activator **inhibitor** 3 (PAI-3; urinary urokinase **inhibitor**) are immunologically identical. The role of PCl for urokinase (uPA) inhibition in vivo was investigated. We therefore developed an enzyme-linked immunosorbent assay (ELISA) specific for uPA-PCl **complexes**: Rabbit anti-PCl IgG was immobilized on a microtiter plate and following incubation with uPA-PCl **complex**-containing samples, bound uPA-PCl **complexes** were quantified with a horseradish-peroxidase-linked monoclonal **antibody** (MoAb) to uPA. Using this assay, time, dose, and heparin-dependent **complexes** were detected when uPA was incubated with normal plasma or purified urinary PCl, whereas no **complexes** were measurable using PCl-immunodepleted plasma. Plasma samples (containing 20 mmol/L benzamidine to prevent **complex** formation ex vivo) from patients undergoing systemic urokinase therapy (1 x 10^{sup}.6 IU/60 min intravenously .cents.IV!) after myocardial infarction were also studied. uPA present in these plasma samples (up to 1,200 ng/mL) had only 43% to 70% of the specific activity of purified 2-chain uPA, suggesting that a major portion of uPA is complexed to **inhibitors**. In these plasma samples uPA-PCl **complexes** were present in a concentration corresponding to 21% to 25% of inactive uPA antigen. These data suggest that at high uPA concentrations, such as during uPA therapy, plasma PCl might contribute significantly to uPA inhibition in vivo.

L76 ANSWER 13 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
DUPLICATE

ACCESSION NUMBER: 1989:19258379 BIOTECHNO
TITLE: Determination of functional and antigenic **protein C inhibitor** and its **complexes** with activated **protein C** in plasma by ELISA's
AUTHOR: Espana F.; Griffin J.H.
CORPORATE SOURCE: Department of Immunology, Research Institute of Scripps Clinic, La Jolla, CA 92037, United States.
SOURCE: Thrombosis Research, (1989), 55/6 (671-682)
CODEN: THBRAA ISSN: 0049-3848
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1989:19258379 BIOTECHNO
AB Enzyme-linked immunosorbent assays (ELISA's) were developed for the

measurement of **protein C inhibitor** (PCI) antigen and activity and for its **complexes** with activated **protein C** (APC) in plasma. For PCI activity and antigen, APC or anti-PCI, respectively, was immobilized to microtiter plates and PCI bound was detected with labelled anti-PCI **antibodies**. For APC:PCI **complexes**, two different **antibodies** directed against **protein C** and PCI were used. The assays for PCI were calibrated with pooled normal human plasma (NHP) and with purified PCI, and for APC:PCI **complexes** with known concentrations of purified pre-formed **complexes** added to buffer or to plasma. The lower limit of sensitivity of the PCI activity and antigen assays was 10 ng/ml and 0.5 ng/ml, respectively and for plasma APC:PCI **complexes** 12 ng/ml. Mean coefficients of variation of 1.5% to 5.8% (intra-assay) and 2.1% to 9.8% (inter-assay) were found for the assays. For PCI antigen, a range of 56% to 162% of the NHP value was obtained in samples from 70 healthy donors (mean \pm SD = 98.6% \pm 23.1%). For PCI activity, the range was 59% to 148% (94.3% \pm 20.2). A good correlation (0.92) was obtained when both assays were compared. Plasma levels of APC:PCI **complexes** in 30 normals were under the detection limit (< 12 ng/ml). In plasma samples from 10 patients with disseminated intravascular coagulation (DIC) PCI antigen concentrations were decreased (55.6% \pm 20%) and 8 of the patients had APC:PCI **complex** levels between 32 and 240 ng/ml (median, 35 ng/ml). After addition of 20 μ g/ml APC to NHP or to **protein C** depleted plasma, 6.1 μ g/ml **complexes** were recovered after 90 min incubation. Incubation of 10 μ g/ml APC with NHP in the presence of 10 U/ml heparin yielded 11 μ g/ml **complexes** after 90 min, which represent more than 90% of the maximum possible value. Thus, the method should be adequate to study **complexes** of APC in vivo in clinical conditions in which activation of **protein C** pathway may occur.

L76 ANSWER 14 OF 14 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 ACCESSION NUMBER: 1987:17165185 BIOTECHNO
 TITLE: Immunological identity of heparin-dependent plasma and urinary **protein C inhibitor** and plasminogen activator **inhibitor-3**
 AUTHOR: Heeb M.J.; Espana F.; Geiger M.; Collen D.; Stump D.C.; Griffin J.H.
 CORPORATE SOURCE: Research Institute of Scripps Clinic, La Jolla, CA 92037, United States.
 SOURCE: Journal of Biological Chemistry, (1987), 262/33 (15813-15816)
 CODEN: JBCHA3 ISSN: 0021-9258
 DOCUMENT TYPE: Journal; Article
 COUNTRY: United States
 LANGUAGE: English
 AN 1987:17165185 BIOTECHNO
 AB Purified plasma and urinary **protein C inhibitors** (PCI) formed heparin-dependent **complexes** with activated **protein C** (APC) which were detected by immunoblotting after nondenaturing gel electrophoresis. Bands representing APC. \cdot PCI **complexes** were also seen on immunoblots after incubation of plasma with APC and heparin. The same immunoblot pattern of **complexes** was detected by three different methods: method A, monoclonal **antibody** to plasminogen activator **inhibitor-3** (PAI-3, urinary urokinase **inhibitor**) + 125 I-labeled anti-mouse IgG; method B, polyclonal **antibodies** to PCI + 125 I-labeled purified plasma PCI; and method C, monoclonal **antibody** to **protein C** + 125 I-**protein C**. Plasma depleted of PAI-3 by immunoadsorption with insolubilized monoclonal **antibody** to PAI-3 showed no detectable antigen or

complexes with APC as visualized by methods A or B. This PAI-3-depleted plasma had less than 10% of the heparin-dependent inhibitory activity of normal plasma toward APC. Purified plasma PCI was fully reactive in an enzyme-linked immunoabsorbent assay for PAI-3, and plasma and urinary PCI inhibited urokinase activity in a heparin-dependent manner. These data indicate that heparin-dependent plasma and urinary PCI and PAI-3 are immunologically and functionally very similar if not identical. This observation identifies a new interrelation between the **protein C** anticoagulant and the fibrinolytic systems. In addition, plasma contains a heparin-independent **inhibitor** of APC which is not immunologically related to plasma PCI or to PAI-3.